

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 444 – OPEN BURNING

*(Adopted October 8, 1976) (Amended October 2, 1981) (Amended October 2, 1987)
(Amended December 21, 2001)*

(a) Purpose

The purpose of this rule is to ensure open burning in the District is conducted in a manner that minimizes emissions and smoke and is managed consistent with state and federal law.

(b) Applicability

The provisions of this rule apply to any person conducting or allowing any open burning including, but not limited to:

- (1) agricultural burning
- (2) disposal of Russian thistle (*Salsola kali* or “tumbleweed”)
- (3) prescribed burning
- (4) fire prevention/suppression training
- (5) open detonation or use of pyrotechnics
- (6) fire hazard removal
- (7) disposal of infectious waste, other than hospital waste
- (8) research of testing materials, equipment or techniques
- (9) disposal of contraband
- (10) residential burning

(c) Definitions

- (1) AGRICULTURAL BURNING means open burning of vegetative materials produced wholly from the growing and harvesting of crops in agricultural operations, including the burning of grass and weeds in fence rows, ditch banks and berms in non-tillage orchard operations, fields being prepared for cultivation, agricultural wastes, and the operation or maintenance of a system for the delivery of water for agricultural operations.
- (2) AGRICULTURAL OPERATIONS means any operation occurring on a ranch or farm directly related to the growing of crops, or raising of fowl or animals for the primary purpose of making a profit or for a livelihood, or

of conducting agricultural research or instruction by an educational institution.

- (3) **AGRICULTURAL WASTES** means unwanted or unsalable materials produced wholly from agricultural operations directly related to the growing of crops or animals for the primary purpose of making a profit or for a livelihood. The term does not include items such as, plastic, rubber, ornamental or landscape vegetation, shop wastes, construction and demolition material, garbage, oil filters, tires, tar paper, pesticide and fertilizer containers, broken boxes, pallets, sweat boxes, packaging material, packing boxes or any other material produced in the packaging or processing of agricultural products. Orchard or vineyard waste or any other material, generated as a result of land use conversion to nonagricultural purposes is not agricultural waste.
- (4) **APPROVED IGNITION DEVICES** means those instruments or materials that will ignite agricultural waste without the production of black smoke by the ignition device. This would include such devices using liquid petroleum gas, butane, propane, or diesel oil burners and flares where the device produces a flame and the flame is then used for ignition.
- (5) **BURN IMPLEMENTATION PLAN** means a document prepared by a land manager that identifies the project(s) to be burned, provides a description of the project(s) to be burned, identifies the person or agency conducting the burn, lists the qualifications of the person or agency conducting the burn and provides a schedule for implementing the identified prescribed burn project(s).
- (6) **FIRE HAZARD** means a hazardous condition involving combustible, flammable, or explosive material, that represents a substantial threat to life or property if not immediately abated, as declared by a fire protection agency.
- (7) **FIRE PREVENTION/SUPPRESSION TRAINING** means the instruction of employees in the methods of preventing or suppressing fires.
- (8) **FIRE PROTECTION AGENCY** means any public agency with the responsibility and authority to protect people, property, and the environment from fire, within its respective area of jurisdiction.
- (9) **LAND MANAGER** means any federal, state, local, or private entity that administers, directs, oversees, or controls the use of public or private land, including the application of fire to the land.

- (10) **MARGINAL BURN DAY:** a day in an air basin when open burning for individual projects is restricted to designated source/receptor areas and is not prohibited by the CARB or Executive Officer of the District. A marginal burn day is declared when:
- (A) at least one of the meteorological criteria for an air basin is met
 - (B) the California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the designated source/receptor area, and
 - (C) no California 1-hour Ozone Health Advisory Episodes are predicted in the basin.
- (11) **METEOROLOGICAL CRITERIA:** defines the daily predicted meteorological conditions that need to be satisfied to permit open burning for an air basin. The criteria are as follows:
- (A) **Burn Area 40: South Coast Air Basin** (at least one criteria must be satisfied):
 - (i) the expected height of the inversion base, if any, near 6:00 a.m. at Los Angeles International Airport is 1,500 feet above mean sea level or higher;
 - (ii) the expected maximum mixing height during the day is above 3,500 feet above the surface;
 - (iii) the expected mean surface wind between 6:00 a.m. and noon is greater than five miles per hour;
 - (B) **Burn Area 53: Mojave Desert Air Basin** (all criteria must be satisfied):
 - (i) near the time of day when the surface temperature is at a minimum, the temperature at 3,000 feet above the surface is not warmer than the surface temperature by more than 13 degrees Fahrenheit.
 - (ii) the expected temperature at 3,000 feet above the surface is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.
 - (iii) the expected daytime wind speed at 3,000 feet above the surface is at least 5 miles per hour
 - (C) **Burn Area 55: Salton Sea Air Basin** (at least three criteria must be satisfied):
 - (i) near the time of day when the surface temperature is at a minimum, the temperature at 3,000 feet above the surface

is not warmer than the surface temperature by more than 13 degrees Fahrenheit.

- (ii) the expected temperature at 3,000 feet above the surface is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.
 - (iii) the expected daytime wind speed at 3,000 feet above the surface is at least 5 miles per hour.
 - (iv) the expected daytime wind direction in the mixing layer is not southeasterly.
- (12) NO BURN DAY: a day in an air basin on which open burning is prohibited by the CARB or Executive Officer of the District. A no burn day is declared when:
 - (A) none of the meteorological criteria for an air basin are met or
 - (B) a California 1-hour Ozone Health Advisory Episode (0.15 ppm) is predicted in the basin.
- (13) OPEN BURNING COMBUSTION/OPEN DETONATION means the ignition and subsequent burning, or ignition, rapid decomposition and subsequent burning of solid, liquid, or gaseous materials, outside of a combustion chamber with or without a visible flame and not directed through a chimney or flue.
- (14) PERMISSIVE BURN DAY: a day in an air basin on which open burning is not prohibited by the CARB or Executive Officer of the District. A permissive burn day is declared when:
 - (A) at least one of the meteorological criteria for an air basin is met; and
 - (B) a California 1-hour ozone standard (0.09 ppm) is not predicted to be exceeded in the basin.
- (15) PRESCRIBED BURNING means planned open burning conducted by a public agency, or through a cooperative agreement or contract involving a public agency identified on lands selected in advance for removal of:
 - (A) vegetation from land predominantly covered with chaparral, trees, grass, or standing brush; or
 - (B) forest vegetation or debris for the purposes of forest protection; or brush, weeds, arundo, or other plant matter to promote a healthier environment for plant or animal species or to re-establish native plant species; or

- (C) disease and pest prevention.
 - (16) RESIDENTIAL BURNING means open burning for the purposes of disposing of combustible or flammable solid waste, excluding Russian Thistle, from a specific residence on its premises.
 - (17) SMOKE MANAGEMENT PLAN means a document prepared for each open burning event or project by land managers that provides information and procedures to minimize smoke impacts.
- (d) Requirements and Prohibitions
- (1) A person shall not conduct or allow open burning:
 - (A) unless the Executive Officer has declared the day as a permissive burn day and such burning is not prohibited by a public fire protection agency; and
 - (B) without first obtaining a written permit from a the Executive Officer, unless the applicable fire protection agency has issued a permit for the burn; and
 - (C) without first receiving authorization from the Executive Officer for each day for each open burning event.
 - (2) The Executive Officer may authorize open burning for:
 - (A) agricultural burning;
 - (B) prescribed burning;
 - (C) disposal of Russian thistle;
 - (D) abatement of a fire hazard that a fire protection agency determines cannot be abated by an economically, ecologically and logistically viable option;
 - (E) disposal of waste infected with an agricultural pest or disease hazardous to nearby agricultural operations and upon the order of the County Agricultural Commissioner;
 - (F) disposal of infectious waste, other than hospital waste, upon the order of the County Health Officer to abate a public health hazard;
 - (G) the use of pyrotechnics for creation of special effects during filming of motion pictures, videotaping of television programs or other commercial filming or video production activities;
 - (H) disposal of contraband in the possession of public law enforcement personnel provided they demonstrate that open burning is the only reasonably available method for safely disposing of the material;

- (I) fire prevention/suppression training (NOTE: Where training involves the burning of existing structures, notifications and compliance with all other requirements of Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities shall be required); and
 - (J) the purpose of researching or testing fire retardant properties of materials (or enclosures) or the efficacy of fire suppression techniques or devices.
- (3) A person is prohibited from open burning for:
- (A) residential burning;
 - (B) disposal of waste, except as specified in (d)(2) above, including hospital waste;
 - (C) materials generated as a result of land use conversion for non-agricultural purposes;
 - (D) disposal of materials from the production or storage of military ordnance, propellants, or pyrotechnics unless a fire protection agency, law enforcement agency or governmental agency having jurisdiction determines that onsite burning or detonation in place is the only reasonably available method for safely disposing of the material; and
 - (E) wildland suppression fires, except those set by fire protection agencies, for the purpose of saving life or property.
- (4) A person shall not commence open burning for:
- (A) agricultural field crop burning before 10:00 A.M. or later than 5:00 P.M.; and
 - (B) open burning other than field crop burning earlier than one hour after sunrise with no new ignition, or fuels to be added to an existing fire, later than two hours before sunset except as authorized at a time consistent with an approved smoke management plan.
- (5) A person shall use only approved ignition devices to ignite open burning.
- (6) Additional requirements for agricultural burning
- (A) A person shall not conduct or allow the open burning of agricultural waste unless it has been allowed to dry for the following minimum times:
 - (i) Trees and large branches (3” or greater): 6 weeks

- (ii) Prunings and small branches (1" to less than 3" diameter): 4 weeks
 - (iii) Fine fuels (.25" to less than 1" diameter): 3 weeks
 - (iv) Very fine fuels (less than .25"): 10 days
 - (B) A person shall not conduct or allow the open burning of agricultural waste unless it is free of dirt, soil, and visible moisture.
 - (C) A person shall ignite rice, barley, oat and wheat straw only by strip-firing or by backfiring into the wind unless a fire protection agency declares such actions would constitute a fire hazard.
- (7) Additional requirements for prescribed burning.
- (A) Prescribed burning shall not be conducted until a burn implementation plan is approved in writing by the Executive Officer.
 - (B) A person shall conduct or allow prescribed burning only when the fires are set by, under the jurisdiction of, or pursuant to the orders or requirements of a fire protection agency.
 - (C) Prior to conducting or allowing prescribed burning for any project greater than 10 acres or that produces more than one ton of particulate matter emissions, as determined using EPA AP-42 or equivalent emissions factors approved by the Executive Officer, CARB, and EPA, a person shall have a Smoke Management Plan approved in writing by the Executive Officer. At a minimum, the Smoke Management Plan shall contain the following information:
 - (i) location, types, and amounts of material to be burned;
 - (ii) expected duration of the fire from ignition to extinction;
 - (iii) identification of responsible personnel, including telephone contacts;
 - (iv) identification and location of all smoke sensitive areas; and
 - (v) where the particulate emissions tonnage is selected as the criteria for determining the project size, calculation of the particulate emissions tonnage.
 - (D) Prior to conducting or allowing prescribed burning for any project greater than 100 acres or that produces more than 10 tons of particulate matter emissions, as determined using EPA AP-42 or equivalent emissions factors approved by the Executive Officer, CARB, and EPA, a person shall have a Smoke Management Plan

approved in writing by the Executive Officer. At a minimum, the Smoke Management Plan shall contain the information required by (d)(7)(C) and the following information:

- (i) identification of meteorological conditions necessary for burning;
 - (ii) the smoke management criteria the land manager will use for making burn ignition decisions;
 - (iii) projections, including a map, of where the smoke from burns are expected to travel both day and night;
 - (iv) specific contingency actions (such as fire suppression or containment) that will be taken if smoke impacts occur or meteorological conditions deviate from those specified in the smoke management plan;
 - (v) an evaluation of and consideration of economically, and logistically viable alternatives to burning; and
 - (vi) discussion of public notification procedures.
- (E) The Executive Officer shall prioritize burn authorization requests based upon:
- (i) the burner's demonstrated level of training identified in the burn implementation and smoke management plans; and
 - (ii) the measures identified in the smoke management plan proposed to reduce emissions.
- (F) Notwithstanding (d)(1)(A), the Executive Officer may allow prescribed burning on marginal burn days provided a smoke management plan has been approved and the predicted daily maximum hourly average ozone concentration in the source receptor area of the prescribed burn meets the California 1-hour ozone standard.

(e) The Executive Officer may allow the Maximum Daily Burn Acreage for Agricultural Burning and Prescribed Burning as follows:

- (1) for all areas within the District jurisdiction, excluding the Coachella Valley:
 - (A) 150 acres for prescribed wildland and range burning; and
 - (B) 150 acres for agricultural burning;
- (2) for the Coachella Valley:

- (A) 5 acres for prescribed wildland and range burning; and
 - (B) 35 acres for agricultural burning; and
 - (3) the provisions of this subdivision shall not apply to prescribed burning when a land manager has:
 - (A) demonstrated that the prescribed burn is required to reduce a fire hazard that jeopardizes public health or safety; and
 - (B) a satisfactory smoke management plan has been submitted and approved by the AQMD.
- (f) Exemptions
 - (1) The provisions of (d)(1) and (d)(4) of this rule shall not apply to wildfire suppression ignited to save life or valuable property when conducted by a fire protection agency pursuant to Section 4462 of the Public Resources Code.
 - (2) Fire Prevention/Suppression Training, except for the burning of existing structures, conducted by fire protection agencies are exempt from the provisions of (d)(1)(A) and (d)(1)(B) provided each training fire is no more than 30 minutes duration. Such training conducted by fire protection agencies involving the burning of existing structures is exempt from the provisions of (d)(1)(B) provided each training fire is no more than 30 minutes in duration.
 - (3) Fire Prevention/Suppression Training conducted on permissive burn days is exempt from the provisions of (d)(1)(B) and (d)(1)(C), provided each fire is no more than 30 minutes in duration and each fire uses exclusively pipeline quality natural gas, liquefied petroleum gas or a petroleum liquid having an API gravity of at least 30.
 - (4) The provisions of (d)(1)(C) shall not apply to open burning of Russian thistle.
 - (5) The provisions of this rule shall not apply to:
 - (A) recreational fires or ceremonial fires; or
 - (B) open burning of natural gas, propane, untreated wood, or charcoal for the purpose of:
 - (i) preparation or warming of food for human consumption; or
 - (ii) generating warmth at a social gathering; or
 - (C) open burning located on islands 15 miles or more from the mainland coast; or

- (D) fireworks displays; or
- (E) pyrotechnics used for creation of special effects at theme parks; or
- (F) detonation of explosives during:
 - (i) quarry or mining operations; or
 - (ii) bomb disposal by a law enforcement agency; or
 - (iii) the demolition of buildings or structures.
- (G) the use of pyrotechnics, detonation of explosives, or fire effects for creation of special effects during theatrical productions, filming of motion pictures, videotaping of television programs or other commercial filming or video production activities. Fire effects shall be no more than 30 minutes in duration and the fuel shall be exclusively pipeline quality natural gas, liquefied petroleum gas, mapp gas, or a petroleum liquid having an API gravity of at least 30.